ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

8. Analysis

1991 MS Classification: 26,46
Novikov, Igor-Ya., Voronezh State University, Russia
Time-frequency localization of modified Daubechies wavelets
Classical Daubechies wavelets with the growth of smoothness approximate in L^2-norm the Shannon wavelets and as a consequence loose the time localization. Daubechies scaling filters can be modified in such a way that corresponding modified wavelets with compact supports and arbitrary finite smoothness approximate the Meyer wavelets and though preserve time-frequency localization with the growth of smoothness.